

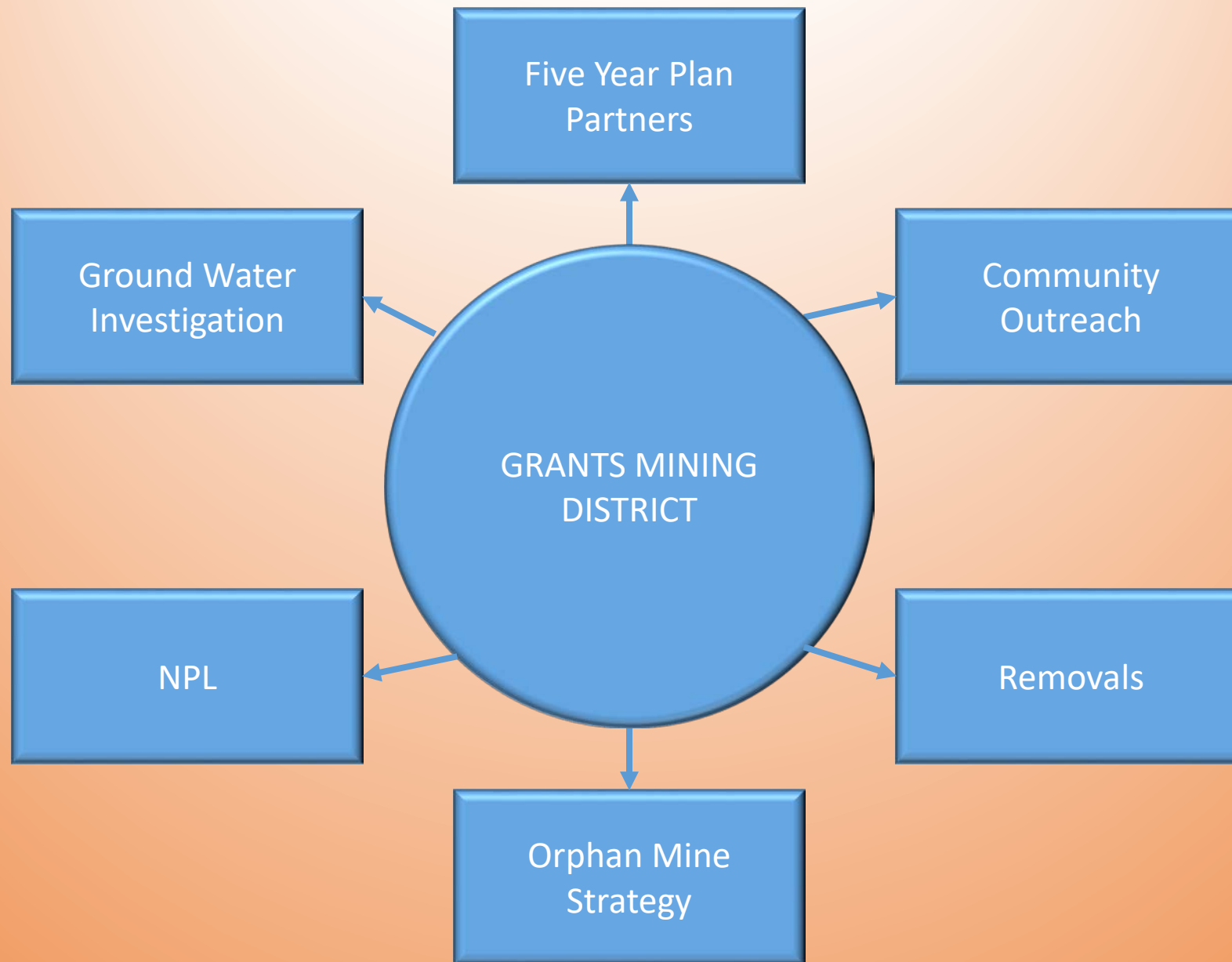
REDACTED VERSION

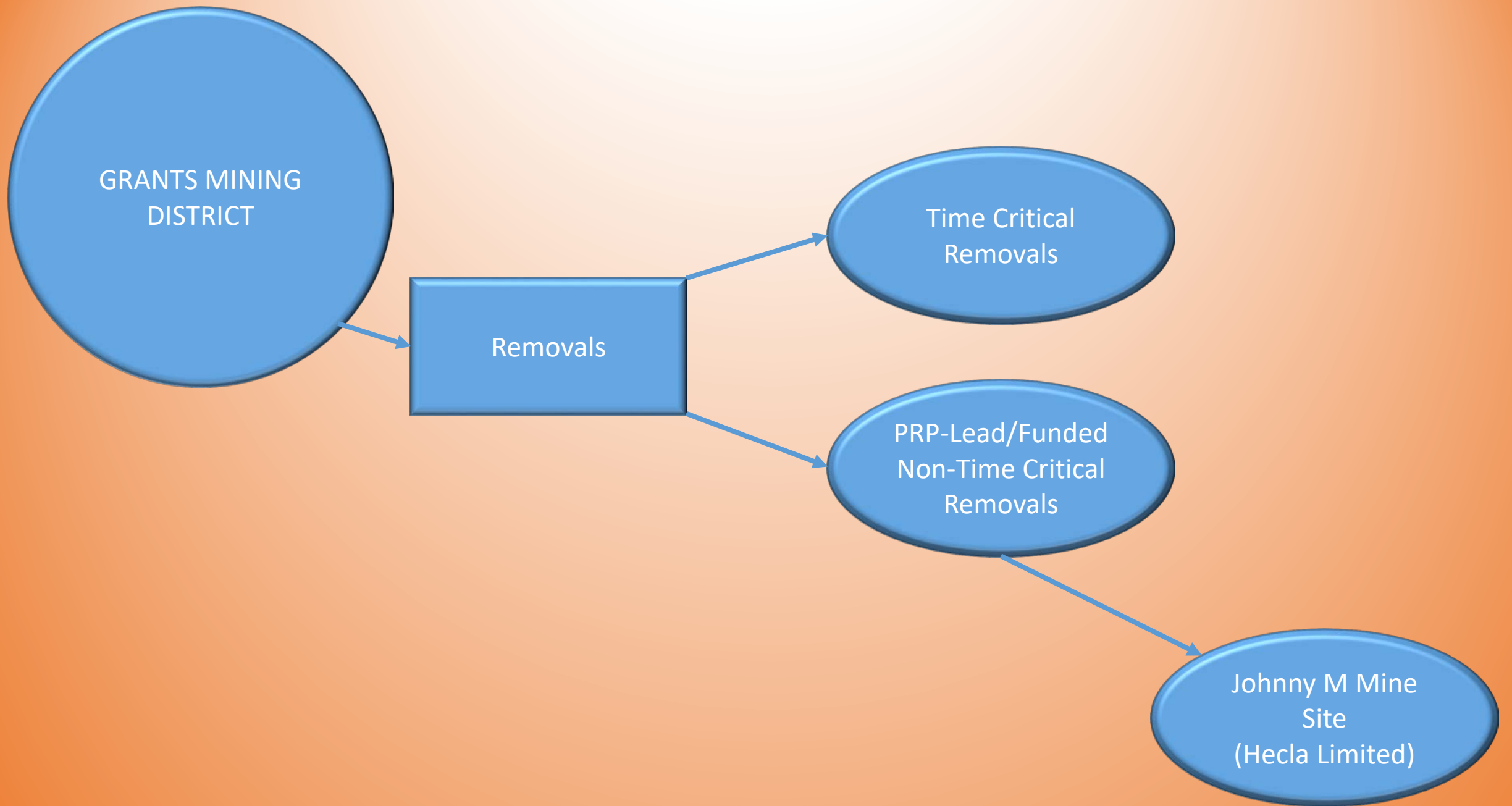
# Johnny M Mine Site

## McKinley County, New Mexico

### Status Update 04/2017

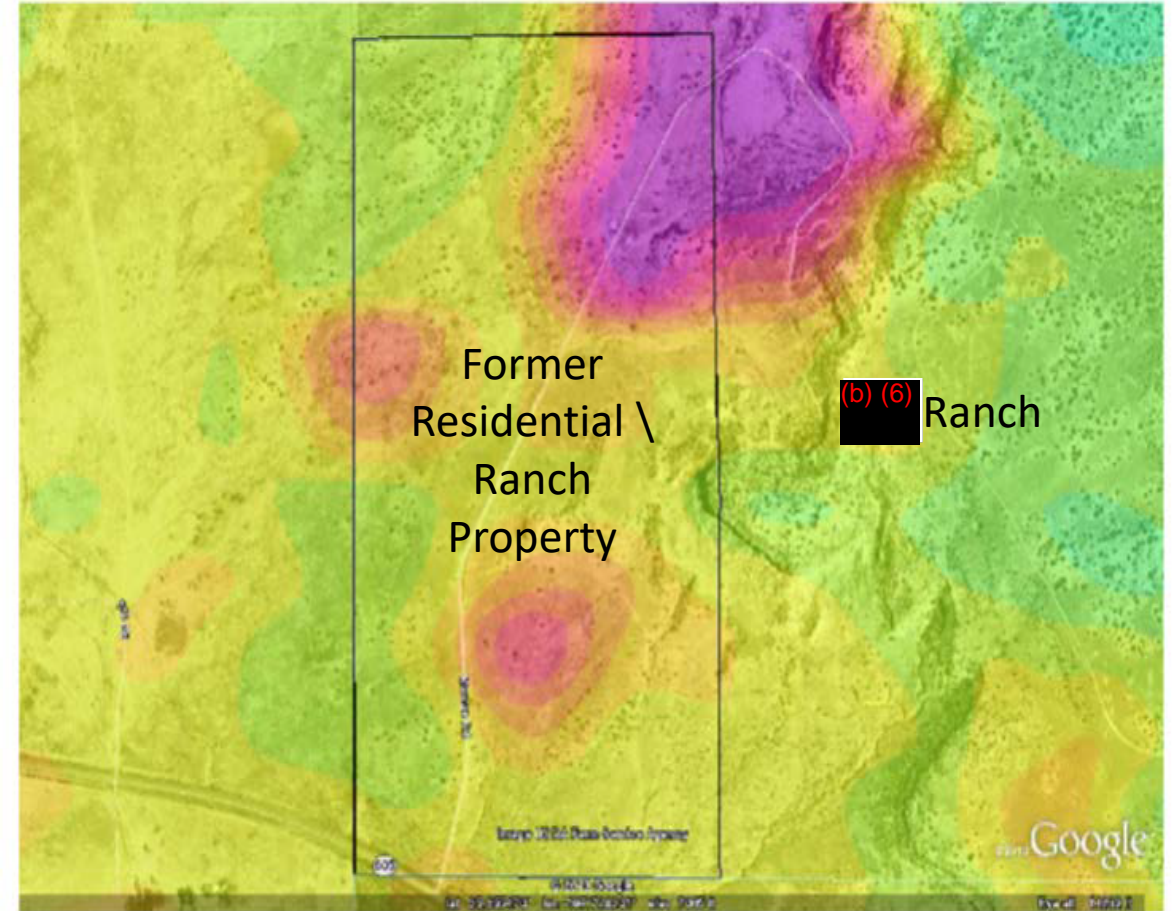
FOR DISCUSSION PURPOSES ONLY





# Initial Actions

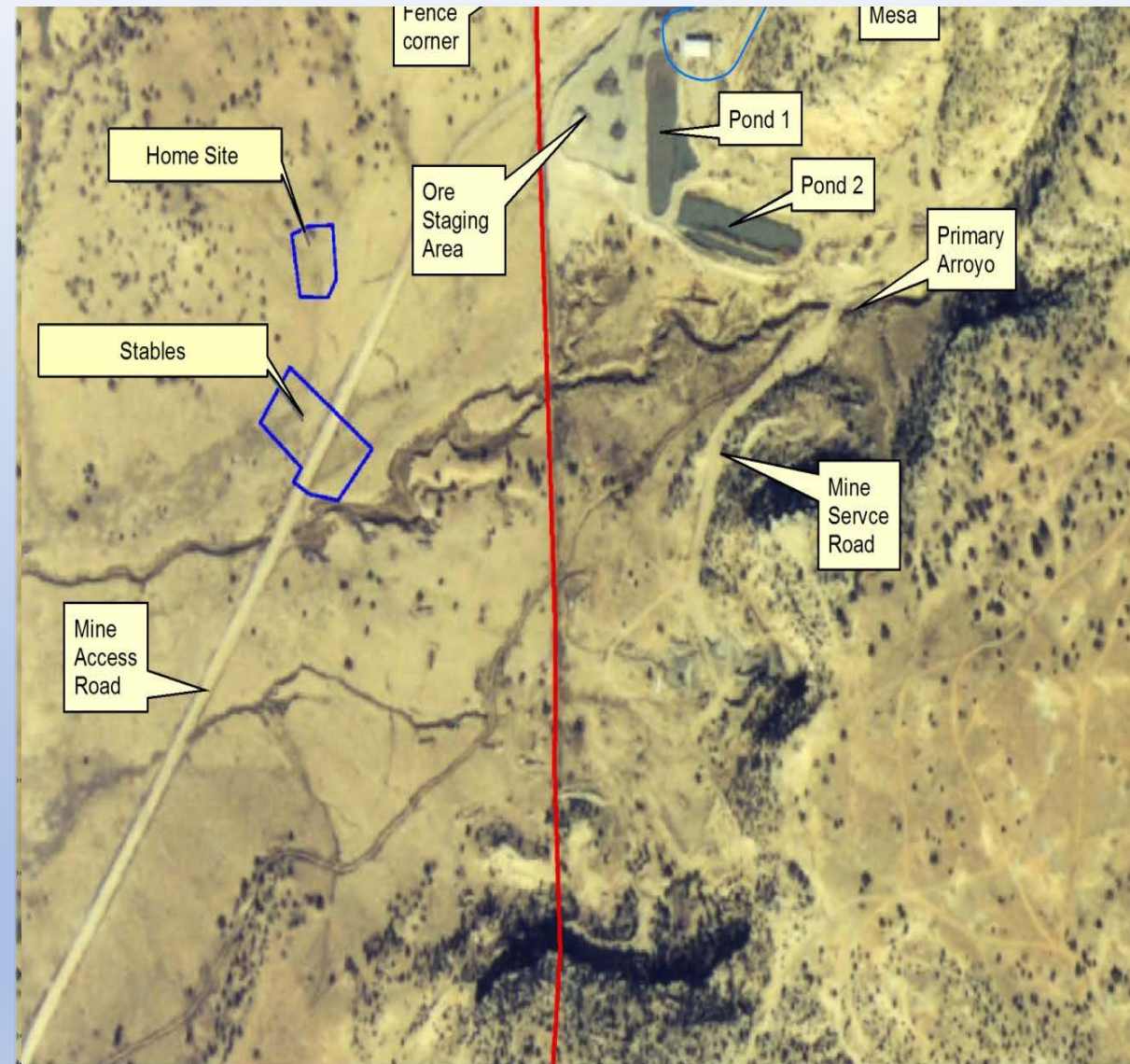
- Site was identified on 2009 ASPECT overflight as area of concern.
- Contacted surface rights owner of mine site ((b) (6) Ranch) in early 2010; access for assessment DENIED.
- NMED contacted EPA 6 in late 2010 requesting assistance re: elevated radiological drinking water well sample results at the adjacent Residential\Ranch Property.
- EPA 6 initiated a removal site evaluation on the Residential\Ranch Property in early 2011.





# Background Information

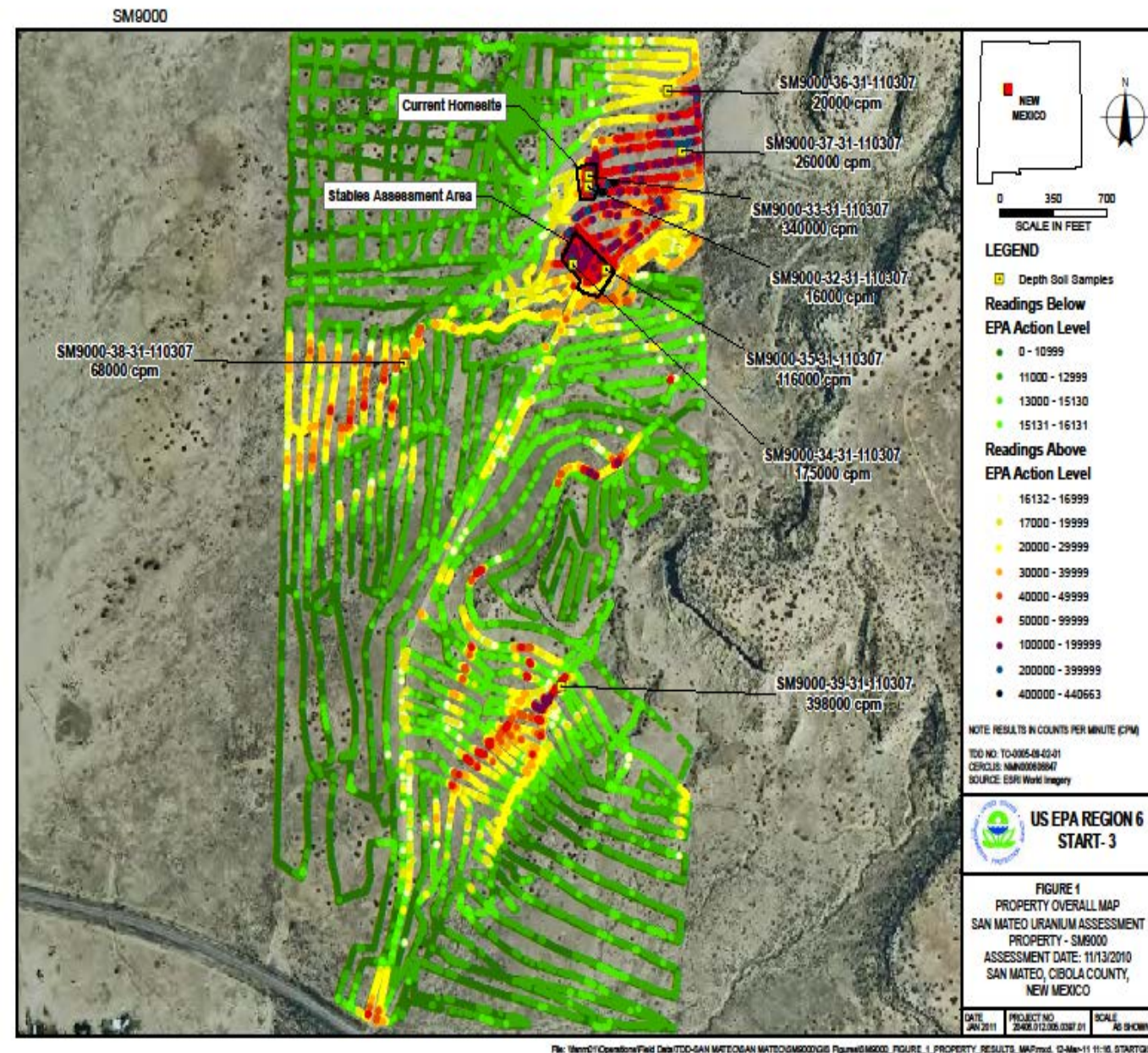
- The Johnny M Mine is located 0.3 miles east of the Residential \ Ranch Property. Ranchers Exploration, the operator, merged with Hecla Mining.
- Operated as a wet mine from 1972 - 1982.
- Uranium mill tailings were used to prevent encroachment of groundwater into the mine. Process originated under State license and oversight until 1986; transferred to NRC.
- The last activity at the mine was in 1993; NRC license termination.





# Summary of RSE/Actions Taken on Residential\Ranch Property

- High levels of gamma radiation detected in the soil adjacent to the home (222,000 cpm) and the barn/corrals (201,000 cpm).
- High levels of gamma radiation (80,000 cpm) and Radon-222 (19 pCi/l) detected in the home.
- The MCL exceeded for gross alpha and Radium-226/228 in the only source of drinking water on the property.
- 03/2011 EPA 6 Superfund DD verbally approved temporary relocation of residents and business.



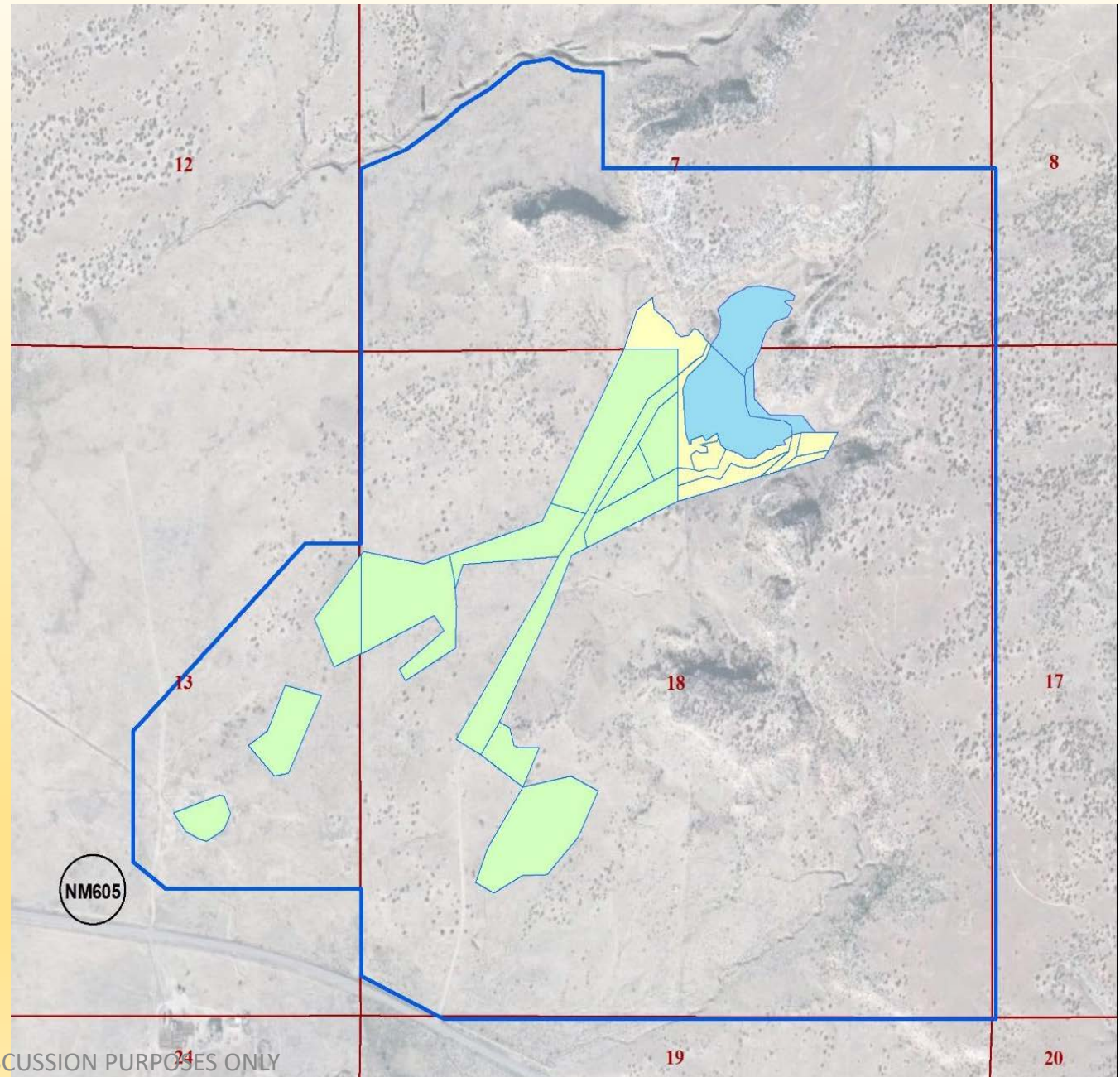
# Summary of Enforcement Actions Taken

- **03/2011 EPA 6 began negotiations with Hecla and notified them of intent to temporarily relocate residents and business.**
- **04/2011 residents and business temporarily relocated (6 months).**
- **05/2011 EPA 6 Superfund DD signed initial AM for temporary relocation. A 6 month extension AM was signed in 09/2011.**
- **02/2012 Hecla buys out the adjacent Residential \ Ranch Property and temporary relocation agreement between owner and EPA 6 is terminated.**
- **08/16/2012 Hecla signs AOC to conduct an EE/CA for the Johnny M Mine Site.**



# Hecla Site Investigation Report (SIR) \ Removal Site Evaluation Summary (RSE)

- SIR report submitted in 03/2013:
  - ❖ Defined Site boundary;
  - ❖ Extent of surface and near surface radiological contamination (@ 500,000 cubic yards);
  - ❖ Groundwater contamination was not evaluated per the AOC.
- EPA 6 accepted SIR with revisions Fall 2014.
- EE/CA Approval Memo signed on 08/13/2014.





# Hecla EE/CA Summary

- **Submitted to EPA 6 in 12/2014**
  - ❖ **Cost analysis on 3 alternatives:**
    - **No Action;**
    - **Off-site Disposal (\$85.6M to \$221M);**
    - **On-Site Repository (\$5.6M)**
  - ❖ **On-Site repository selected as preferred alternative.**  
Post removal site control would be consistent with the NCP (300.415(l)) options: PRPs, the state or the remedial program.
- **EE/CA accepted on 06/05/2015 with the following reservations:**
  - ❖ **The details in the engineering design and costs of the repository design;**
  - ❖ **Potential data gaps in the SIR;**
  - ❖ **Determine CERCLA risk based scenario(s) and associated clean-up level(s).**
- **Requested CIP for Site from CI Team in 06/2015, required prior to publishing EE/CA for public comment. CIP approved by R6 Superfund DD, 01/17.**
- **Hecla has completed work under the AOC**



# NEXT STEPS

- **Publish EE/CA for required 30 day public comment period**
  - **Notification to Hecla Limited**
- **Review and respond to public comments**
- **Draft NTC Action Memo**
- **Issue Notice to Hecla Limited & New Mexico Land, LLC for NTC Removal**